

PAPERS READ BEFORE THE SOCIETY FROM FEBRUARY 1892  
TO JANUARY 1893.

1892.

- Mar. 11. Ephemeris of the satellites of *Uranus*, 1892. A. Marth.  
The reappearance of *Saturn's* ring. G. Comstock.  
Results of double star measures with the 8-inch equatorial at Windsor. New South Wales, in 1891. J. Tebbutt.  
Maxima and minima of variable stars, observed during the years 1889, 1890, and 1891. J. Mitchell.  
On the displacement of the apparent radiant points of meteor showers, due to the attraction, rotation, and orbital motion of the earth. J. Kleiber.  
Observations of nebulae with the 36-inch refractor of the Lick Observatory. S. W. Burnham.  
A new binary star,  $\beta$  581. S. W. Burnham.  
Occultation of  $\gamma_1$  and  $\gamma_2$  *Virginis*. Rev. A. Freeman.  
The apparent places of close polar stars. A. M. W. Downing.  
The new star in *Auriga*. G. Knott.  
Photograph of the region of *Nova Cygni*. Isaac Roberts.  
Photograph of the region of *Nova Aurigae*. Isaac Roberts.  
Preliminary note on the magnitude of the new star in *Auriga*. Professor C. Pritchard.  
Ephemeris for physical observations of *Mars*, 1892. A. Marth.  
Ephemeris of the satellites of *Saturn*, 1891-92 (concluded). A. Marth.  
Note on the spectrum of *Nova Aurigae*. E. W. Maunder.  
On the photographic magnitude of *Nova Aurigae*, as determined at the Royal Observatory, Greenwich. W. H. M. Christie.  
On the large Sun-spot of 1892 February 5-17, and the associated magnetic disturbance, observed at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

- On an annual variation in the R — D discordance.  
H. H. Turner.
- Observations of the spots and markings on the planet  
*Jupiter*, made at the Dearborn Observatory, Evanston,  
Illinois. Professor G. W. Hough.
- Apr. 8. Note on the transit of *Titan*, 1892 March 11. A. Mee.  
The double star  $\Sigma$  3123. S. W. Burnham.  
Anderson's new star in *Auriga*. S. W. Burnham.  
Observations of the reappearance of the rings of *Saturn*:  
observations of the position-angles of the rings and  
observations of the satellites. E. E. Barnard.  
The new star in *Auriga*. G. Knott.  
Note on the lunar theory. Professor E. W. Brown.  
Ephemeris for physical observations of *Jupiter*, 1892.  
A. Marth.  
Estimations of magnitude of *Nova Aurigæ*, made at the  
Radcliffe Observatory, Oxford. Communicated by  
E. J. Stone.  
Note on the history of the great Sun-spot of 1892  
February. E. W. Maunder.  
Note on the spectrum of the great spot group of  
1892 February. Professor K. D. Naegamvala.  
On the estimation of star magnitudes by extinction  
with the wedge. Captain W. de W. Abney.
- May. 13. Note on the secular perturbations of the Earth by  
*Mars*. R. T. A. Innes.  
Note on the orbit of a *Centauri*. E. B. Powell.  
On the orbit of  $\gamma$  *Centauri*. J. E. Gore.  
Comet Swift, 1892 March. H. C. Russell.  
On the orbit of  $\gamma$  *Coronæ Australis*. J. E. Gore.  
Negatives of *Jupiter* made with the great telescope of  
the Lick Observatory during 1891. Professor E. S.  
Holden and W. W. Campbell.  
On the illumination of *Saturn's* rings during sunrise,  
and on recent observations of their reappearance.  
Rev. A. Freeman.  
Photographs of the region of the Crab Nebula,  
M 1 *Tauri*. Isaac Roberts.  
Photographic search for a planet beyond the orbit of  
*Neptune*. Isaac Roberts.  
On the formulæ of reduction to apparent places of  
close polar stars. Professor F. Folie.  
Ephemeris for physical observations of *Jupiter*, 1892  
(continued). A. Marth.  
On a new form of altazimuth. W. H. M. Christie.  
Observations of the Moon made at the Radcliffe Obser-  
vatory, Oxford, during the year 1891, and a com-  
parison of the results with the tabular places from  
Hansen's Lunar Tables. E. J. Stone.  
Observations of occultations of stars by the eclipsed

- Moon on 1892 May 11, made at the Radcliffe Observatory, Oxford. Communicated by E. J. Stone.
- Spectrum of *Nova Aurigæ*. Rev. W. Sidgreaves.
- Partial eclipse of the Moon, 1892 May 11, observed at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
- Observations of Swift's comet (*a* 1892) made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
- Estimations of the magnitude of *Nova Aurigæ*. J. G. Lohse.
- On a diagram useful as a guide in adjusting a diffraction grating spectroscope. H. F. Newall.
- Comparison of magnitudes of *Nova Aurigæ* and neighbouring stars, made with the Newall telescope at the Observatory, Cambridge. H. F. Newall.
- On a pretended early discovery of a satellite of *Mars*. Dr. R. Copeland.
- June 10. Ephemeris of the satellites of *Mars*, 1892. A. Marth.
- The lunar eclipse, 1892 May 11; observations made at Mr. Crossley's Observatory, Bermerside, Halifax. E. Crossley and J. Gledhill.
- On a parallel plate double image micrometer. J. H. Poynting.
- Occultations and other phenomena of the lunar eclipse, 1892 May 11. Rev. A. Freeman.
- Orbit of 9 *Argûs*,  $\beta$  101. Professor S. Glasenapp.
- List of the proper motions in the line of sight of 51 stars. Professor H. C. Vogel.
- The orbit of O  $\Sigma$  269. J. E. Gore.
- Observations of Wolf's periodical comet made at the Cambridge Observatory with the Northumberland equatoreal and square bar micrometer. Communicated by the Secretaries.
- Photograph of the region of the globular cluster 15 M *Pegasi*. Isaac Roberts.
- Photograph of the nebula H V. 15, near 52 *Cygni*. Isaac Roberts.
- Observations of Comet *a* 1892 (Swift), made at the Royal Observatory, Cape of Good Hope. Communicated by David Gill.
- Observations of Swift's Comet (*a* 1892), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
- Occultation of 73 *Piscium* by *Jupiter*, 1892 May 23, observed at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
- Orbit of the double star  $\kappa$  *Pegasi* (A C). Professor S. Glasenapp.

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- Data for computing the positions of the satellites of *Jupiter*, 1892. A. Marth.
- Note on Damoiseau's *Tables éclipseptiques des satellites de Jupiter*. A. M. W. Downing.
- Photograph of  $\eta$  *Argûs*. H. C. Russell.
- Sextant observations of comet Swift. Captain G. T. Parson.
- The opposition of *Mars*, 1892. E. J. Stone.
- Nov. 11. Note on the conjunction of *Venus* and *Jupiter* observed in Australia 1892 February 6. A. Marth.
- Observations of phenomena of *Jupiter's* satellites at Windsor, New South Wales, in the year 1891. J. Tebbutt.
- The orbit of *Flora*; with corrections to Brünnow's *Tafeln der Flora*. A. M. W. Downing.
- Observations of Swift's Comet (*a* 1892), and Winnecke's periodical comet, made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
- Observations of U *Orionis*. Lieut.-Col. E. E. Markwick.
- Greenwich mean times of superior and inferior geocentric conjunctions of *Jupiter's* fourth satellite (*Callisto*) from 1892 November to the end of 1893. Communicated by the Superintendent of the *Nautical Almanac*.
- Sextant observations of Swift's Comet. Capt. G. M. Lourison.
- Observations of the variable star S *Ursæ Majoris*. C. E. Peek.
- The orbit of  $\gamma$  *Coronæ Australis*. R. P. Sellors.
- The motion of  $\zeta$  *Cancrî*. S. W. Burnham.
- The new star in *Auriga*. S. W. Burnham.
- On the orbit of  $\Sigma$  2525. J. E. Gore.
- On the systematic errors of the Moon in right ascension. H. H. Turner.
- Probable error of the clock correction when both the clock rate and the instrumental constants are found by a least squares solution of a single night's observations. Rev. J. T. Hedrick.
- Enlarged star and Moon photographs. H. C. Russell.
- Observations of Brooks' Comet (*d* 1892) and Swift's Comet (*a* 1892), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
- On the sidereal period of the new satellite of *Jupiter*. Rev. A. Freeman.
- Nova Aurigæ*. E. E. Barnard.
- Discovery of a comet by photography. E. E. Barnard.

- Note on the period and distance of the fifth satellite of *Jupiter*. E. E. Barnard.
- Corrections to Hansen's *Tables de la Lune*. J. Gordon.
- On the variation of latitude as indicated by recent observations at the Royal Observatory, Greenwich. W. G. Thackeray and H. H. Turner.
- On the photographic magnitude of *Nova Aurigæ*, as determined at the Royal Observatory, Greenwich. W. H. M. Christie.
- Estimations of magnitude of *Nova Aurigæ*, made with the Barclay Equatoreal at the Radcliffe Observatory, Oxford. Communicated by E. J. Stone.
- Observations of Holmes' Comet (*f* 1892), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
- On the best form of mounting for a large reflector. A. A. Common.
- Dec. 9. On the spectrum of the new star in *Aurigæ*, as compared with spectra of planetary nebulae. E. von Gothard.
- The lunar eclipse, 1892, May 11–12. G. J. Newbegin.
- Observations of Winnecke's periodical comet at Windsor, New South Wales. J. Tebbutt.
- The binary star  $\Sigma$  1785. S. W. Burnham.
- Photographs of Comet Holmes. Isaac Roberts.
- Observations of Holmes' Comet, made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
- Elements of Comet Holmes. E. Roberts.
- Note on an occultation of D.M. +  $4^{\circ}123$  (mag. 6.5) by *Mars* on 1893 January 14. A. M. W. Downing.
- 1893.
- Jan. 13. The secular perturbations of the Earth arising from the action of *Venus*. R. T. A. Innes.
- The eclipse of the Moon, 1892 November 4–5, observed at Sydney Observatory. Communicated by H. C. Russell.
- Observations of the phenomena of *Jupiter's* satellites at Bermerside Observatory, Halifax, in the year 1892. J. Gledhill.
- Note on the Red Spot on *Jupiter*. J. Gledhill.
- Observations of the phenomena of the satellites of *Saturn* at Bermerside Observatory, Halifax, in the year 1892. J. Gledhill.
- Ephemeris of *Juno* near the time of opposition, 1893, computed from the corrected elements published in *Monthly Notices*, vol. 1. p. 495. Communicated by the Superintendent of the *Nautical Almanac*.
- Opposition of *Mars*, 1892; observations made at the Royal Observatory, Cape of Good Hope. David Gill.

*Nova Aurigæ.* Isaac Roberts.

Photograph of the nebula  $\text{H I. 55 Pegasi.}$  Isaac Roberts.

Photograph of the cluster  $\text{H VI. 30 Cassiopeiae.}$  Isaac Roberts.

The *Geminid* meteor shower. W. F. Denning.

Observations of Brooks' Comet (*g*, 1892), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

On the variation of latitude by the Greenwich transit-circle observations. S C. Chandler.

Ephemerides of the satellites of *Saturn*, 1893. A. Marth.

On the determination of the equations for the perturbation of the inclination and node of an orbit by the method of variation of constants. R. Bryant.

Estimations of magnitude of *Nova Aurigæ*, made at the Radcliffe Observatory, Oxford. Communicated by E. J. Stone.

Latitude variation and Greenwich observations, 1851-91. W. G. Thackeray.

Observations of occultations of stars by the Moon, and of phenomena of *Jupiter's* satellites during the year 1892. Communicated by the Astronomer Royal.